

CLAIMS

I claim:

1. A system comprising:

- 5 a voice user interface possessing both operational characteristics and security characteristics;
a database to store user-specific contextual information; and
a computer program to use the user-specific contextual information to dynamically change the operational characteristics of the voice user interface.

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2. The system of claim 1 wherein the changed operational characteristic of the voice user interface is a setting of a barge-in level.

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3. The system of claim 1 wherein the changed operational characteristic of the voice user interface is a generation of a grammar file.

4. The system of claim 1 wherein the changed operational characteristic of the voice user interface is a reduction of non-speech audio components in the processing of a communication from the user.

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5. The system of claim 1 further comprising:
the computer program to use the user-specific contextual information to dynamically change the security characteristics of the voice user interface.

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6. The system of claim 5 wherein the security characteristic of the voice user interface is a biometric analysis to authenticate an identity of the user.

7. The system of claim 1 wherein the user-specific contextual information comprises:

an identity of the user; and
a current location of the user.

8. The system of claim 1 wherein the user-specific contextual information comprises:

5 an identity of the user; and
a current task of the user.

9. The system of claim 1 further comprising:

10 the computer program to change the security characteristics of the voice user interface
based upon the sensitivity of the information being communicated to the user.

10. The system of claim 1 further comprising:

15 the computer program to use environmental information to dynamically change the
security characteristics of the voice user interface.

11. The system of claim 10 wherein the security characteristic of the voice user interface is an
addition of an authentication step to authenticate an identity of the user.

12. The system of claim 10 wherein the environmental information is communicated to the
20 system by the user.

13. The system of claim 10 wherein the environmental information comprises audio scene
information at the location of the user.

25 14. The system of claim 13 wherein the environmental information is determined by the
system by comparing the audio scene characteristics at the user's location to known references
and selecting the matching environmental scene.

15. A method comprising:

changing a barge-in level of a voice processing system by using user-specific contextual information; and
changing security requirements of a voice processing system that the system requires from the user based upon user-specific contextual information.

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16. The method of claim 15 further comprising:
changing the barge-in level of the system by using environmental information.

17. The method of claim 15 further comprising:
10 using a dynamically generated grammar file to enhance the ability of the system to recognize communications from the user.

18. The method of claim 15 further comprising:
using biometric analysis to authenticate an identity the user.

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19. The method of claim 15 further comprising:
changing security requirements of the system that the system requires from the user based upon environmental information.

20. The method of claim 15 further comprising:
changing security requirements of the system that the system requires from the user based upon the sensitivity of the information being delivered to the user.

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21. An apparatus comprising:
25 a means for changing the barge-in level of a voice processing system by using user-specific contextual information; and
a means for changing security requirements of a voice processing system that the system requires from the user based upon user-specific contextual information.

22. The apparatus of claim 21 further comprising:

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a means for changing the barge-in level of the system by using environmental information.

23. The apparatus of claim 21 further comprising:

5 a means for generating a grammar file to enhance the ability of the system to recognize communications from the user.

c | 24. A machine-readable medium that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:

10 storing user-specific contextual information; and
changing security requirements of a voice processing system that the system requires from the user based upon user-specific contextual information.

25. The machine-readable medium of claim 24, which causes the machine to perform the further operations comprising:

changing security requirements of the system that the system requires from the user based upon environmental information.

26. The machine-readable medium of claim 24, which causes the machine to perform the further operations comprising:

changing security requirements of the system that the system requires from the user based upon the sensitivity of the information being delivered to the user.

c 15 27. A machine-readable medium that provides instructions, which when

25 executed by a machine, cause the machine to perform operations comprising:

changing the barge-in level of a voice processing system by using user-specific contextual information; and

